Name: $\qquad$ Date: $\qquad$

## Newton's Law of Motion



## Across

2. every object continues in a state of rest or of uniform speed in a straight line unless acted on by a nonzero net force
3. is a force that is exerted on an object by a person or another object or force
4. any push or pull exerted on an object, measured in Newtons 11. whenever one object exerts of a force on a second objects, the second objects exerts an equal and opposite force on the first
5. opposing force that goes against motion; caused by contact between two surfaces
6. scalar quantity of matter in an object.
7. force caused by gravity due to its mass
8. pull of an object on any other object
9. stretching force; ex-spring Down
10. type of friction caused by air; always opposes motion
11. the acceleration of an object is directly proportional to the net force acting on the object
12. upward supportive force
13. SI unit of mass $=1000$ grams; One kilogram (symbol kg) is the mass of liter ( 1 L ) of water
14. product of the mass of an object and its velocity
15. SI unit of force. One newton (symbol N ) is the force that will give an object of mass of 1 kg an acceleration of $1 \mathrm{~m} / \mathrm{s} 2$
16. property of things to resist changes in motion
